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10/770,274	02/02/2004	Jean Francois Rossignol	3765-164	2226
30448 7590 06/29/2007 AKERMAN SENTERFITT P.O. BOX 3188			EXAMINER	
			HUI, SAN MING R	
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			1617	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/770,274	ROSSIGNOL, JEAN FRANCOIS
Office Action Summary	Examiner	Art Unit
	San-ming Hui	1617
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with	the correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a repl will apply and will expire SIX (6) MONTH , cause the application to become ABAN	ATION.  ly be timely filed  IS from the mailing date of this communication.  IS DONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on  2a) This action is <b>FINAL</b> . 2b) This  3) Since this application is in condition for alloward closed in accordance with the practice under Expression in the practice of the	action is non-final.  nce except for formal matter	
Disposition of Claims		
4)  Claim(s) <u>1-13</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed.  6)  Claim(s) <u>1-13</u> is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/o	wn from consideration.	
Application Papers		
9)☐ The specification is objected to by the Examine	ır	
10)☐ The drawing(s) filed on is/are: a)☐ acc		the Examiner.
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Apprity documents have been re u (PCT Rule 17.2(a)).	olication No eceived in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/l 5)  Notice of Info	nmary (PTO-413)  Mail Date  Irmal Patent Application
Paper No(s)/Mail Date	6) 🔲 Other:	

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the instant case, the specification does not provide sufficient information or guidance so that one of skilled in the art would practice the instant invention without undue experimentation.

Ex parte Forman (230 USPQ 546, BdPatApp & Int.) and *In re Wands* (858 F.2d 731, 8 USPQ2d 1400, 1404, Fed. Cir. 1988) provide several factors in determining whether the specification of an application allows the skilled artisan to practice the invention without undue experimentation. Having said factors in mind, the instant specification fails to reasonably provide enablement for methods of preventing the claimed condition. Specifically, the recitation of "prevention of one or more larval or adult stage helminthic infections in a human or an animal" in the instant claims 1 and 2, direct the claims to methods of preventing a pathological condition. However, the specification fails to properly enable such methods.

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In the instant case, the burden of enabling for preventing one or more larval or adult stage helminthic infections requires appropriate screening testing, subsequent data compilation, and finally appropriate data analysis, to assess and properly enable one skill in the art whether one or more larval or adult stage helminthic infections are prevented in a patient. For example, the specification must provide adequate guidance whether one or more larval or adult stage helminthic infections can be prevented from forming in a patient or in this case, a mammal, once the composition is administered to a subject susceptible to have one or more larval or adult stage helminthic infections. Since infection is construed as simply the entry of a single microorganism into the host, it is quite difficult, if not possible, to prevent even one microorganism getting into the body of a human or animal.

Moreover, the specification must provide direct evidence associating the claimed prevention to the composition applied. The burden of showing preventative properties is greater than that of enabling a treatment, because one of ordinary skill in the art must not only show competent screening of those subjects susceptible to such conditions, but also show that the efficacy of a preventative method is directly caused by applying or administering the instantly claimed composition to the susceptible subjects.

In this case, there is no teachings for screening methods identifying susceptible subjects nor is there any direct evidence of efficacy establishing a preventative property associated with the claimed composition. Furthermore, the state of the prior art concerning methods of preventing one or more larval or adult

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stage helminthic infections is not well described, nor does it provide for any absolute prevention. Accordingly, undue experimentation is necessary to determine screening and testing protocols to demonstrate the efficacy of the presently claimed invention.

Moreover, the instant recitation of "animals" encompass such group of animals such as cats, dogs, cows, horses, whales, etc.. Once again, the state of art concerning preventing one or more larval or adult stage helminthic infections for such animals are not well defined. Specification does not provide any working examples nor does it describe the in vivo correlation between all species of mammal the activity of the instant compounds. Accordingly, in order to practice the claimed invention commensurate in scope with the claims, one of ordinary skill in the art must perform undue experimentation to screen for susceptible mammals, test and demonstrate the efficacy of the compositions for preventative methods. Accordingly, specification does not provide adequate enablement under 35 U.S.C. 112, first paragraph.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshmiri et al. (Eur. Respir. J., 1999;14:503-507) and Stettler et al. (Antimicrobial agents and Chemotherapy, 2003;47(2):467-474).

Keshmiri et al. teaches albendazole as effective in treating *Echinococcus* infections (See the abstract). Keshmiri et al. teaches the dosage of albendazole as 800mg (See page 503, col. 2, last paragraph).

Stettler et al. teaches nitazoxanide as effective in battling against Echinococcus multilocularis metacestodes (See the abstract). Stettler teaches the concentration of nitazoxanide used as 10µg/ml (See The Materials and Methods Sections in page 468 and Figure 1).

The references do not expressly teach use of both albendazole and nitazoxanide together in a method of treating *Echinococcus* infection. The references do not expressly teach the herein claimed dosage of albendazole and nitazoxanide. The references do not expressly teach the method of increasing the serum albendazole sulfoxide levels.

It would have been obvious to one of ordinary skill in the art at the time of invention to use both albendazole and nitazoxanide together, in the dosage herein claimed, in a method of treating *Echinococcus* infection.

One of ordinary skill in the art would have been motivated to use both albendazole and nitazoxanide together, in the dosage herein claimed, in a method of treating *Echinococcus* infection. Since both albendazole and nitazoxanide are known to be useful in treating *Echinococcus* infection, concomitantly employ two agents in a single method treating the very same

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purpose is *prima facie* obvious (see *In re Kerkhoven* 205 USPQ 1069 (CCPA 1980)). Furthermore, the optimization of result effect parameters (dosage range, dosing regimens) is obvious as being within the skill of the artisan.

It is noted that although the references does not teach the interaction or effect between albendazole and nitazoxanide, such interaction or effect, i.e., increasing the serum level of albendazole, would be considered present in the treatment method of Echinococcus when both albendazole and nitazoxanide employed together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner

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